

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

March 13, 2013

OFFICE OF  
SOLID WASTE AND  
EMERGENCY RESPONSE

VIA E-MAIL

Mr. Joseph Stanek, Environmental Manager  
Edison International  
1550 Power Plant Road  
Homer City, PA 15748

Re: Request for Action Plan regarding Edison International's – Homer City Generating Station

Dear Mr. Stanek,

On May 16, 2011 the United States Environmental Protection Agency ("EPA") and its engineering contractors conducted a coal combustion residual (CCR) site assessment at the Edison International's – Homer City Generating Station facility. The purpose of this visit was to assess the structural stability of the impoundments or other similar management units that contain "wet" handled CCRs. We thank you and your staff for your cooperation during the site visit. Subsequent to the site visit, EPA sent you a copy of the draft report evaluating the structural stability of the units at the Edison International's – Homer City Generating Station facility and requested that you submit comments on the factual accuracy of the draft report to EPA. Your comments were considered in the preparation of the final report.

The final report for the Edison International's – Homer City Generating Station facility can be accessed at the secured link below. The secured link will expire in 60 days.

Here is the link: <http://www.yousendit.com/download/UVJqV28wNXZlaFJ4Tk1UQw>

This report includes a specific condition rating for each CCR management unit and recommendations and actions that our engineering contractors believe should be undertaken to ensure the stability of the CCR impoundment(s) located at the Edison International's – Homer City Generating Station facility. These recommendations are listed in Enclosure 1.

Since these recommendations relate to actions which could affect the structural stability of the CCR management unit(s) and, therefore, protection of human health and the environment, EPA believes their implementation should receive the highest priority. Therefore, we request that you inform us on how you intend to address each of the recommendations found in the final report. Your response should include specific plans and schedules for implementing each of the recommendations. If you will not implement a recommendation, please provide a rationale. Please provide a response to this request by **April 15, 2013**. Please send your response to:

Mr. Stephen Hoffman  
U.S. Environmental Protection Agency (5304P)  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

If you are using overnight or hand delivery mail, please use the following address:

Mr. Stephen Hoffman  
U.S. Environmental Protection Agency  
Two Potomac Yard  
2733 S. Crystal Drive  
5<sup>th</sup> Floor, N-5838  
Arlington, VA 22202-2733

You may also provide a response by e-mail to [hoffman.stephen@epa.gov](mailto:hoffman.stephen@epa.gov), [dufficy.craig@epa.gov](mailto:dufficy.craig@epa.gov), [kelly.patrickm@epa.gov](mailto:kelly.patrickm@epa.gov) and [englander.jana@epa.gov](mailto:englander.jana@epa.gov).

You may assert a business confidentiality claim covering all or part of the information requested, in the manner described by 40 C. F. R. Part 2, Subpart B. Information covered by such a claim will be disclosed by EPA only to the extent and only by means of the procedures set forth in 40 C.F.R. Part 2, Subpart B. If no such claim accompanies the information when EPA receives it, the information may be made available to the public by EPA without further notice to you. If you wish EPA to treat any of your response as "confidential" you must so advise EPA when you submit your response.

EPA will be closely monitoring your progress in implementing the recommendations from these reports and could decide to take additional action if the circumstances warrant.

You should be aware that EPA will be posting the report for this facility on the Agency website shortly.

Given that the site visit related solely to structural stability of the management units, this report and its conclusions in no way relate to compliance with RCRA, CWA, or any other environmental law and are not intended to convey any position related to statutory or regulatory compliance.

Please be advised that providing false, fictitious, or fraudulent statements of representation may subject you to criminal penalties under 18 U.S.C. § 1001.

If you have any questions concerning this matter, please contact Mr. Hoffman in the Office of Resource Conservation and Recovery at (703) 308-8413. Thank you for your continued efforts to ensure protection of human health and the environment.

Sincerely,  
/Suzanne Rudzinski/, Director  
Office of Resource Conservation and Recovery

Enclosure

**Edison International's – Homer City Generating Station Recommendations (from the final assessment report)**

**CONCLUSIONS**

**Ash Recycle Ponds, 1 through 4, were found to have the following deficiencies:**

**General Deficiencies (All Ash Recycle Ponds):**

1. Sloughing and erosion observed at numerous locations along the inside slopes above the waterline.
2. Inside slopes above the waterline steeper than the 2H:1V as specified on the original design drawings and locally steeper than 1H:1V.
3. Minor ruts and depressions along the top of the embankments, possibly due to past vehicular travel.
4. Moderate corrosion of the steel railing around individual wet well structures.
5. Presence of overgrown vegetation above the waterline along portions of the inside slopes.
6. No Geotechnical computations with respect to the embankments' stability were made available to GZA for review.
7. No Hydrologic/Hydraulic computations with respect to the impoundments' ability to safely pass the Spillway Design Flood (SDF) were made available to GZA for review.

**Deficiencies specific to a particular Pond are described as follows:****Ash Recycle Pond No. 1:**

1. In addition to corrosion, part of the railing around the decant intake structure was observed to be broken/disconnected.

**Ash Recycle Pond No. 2:**

1. Shallow standing water observed near the toe along portions of the west embankment.
2. Overgrown, woody vegetation, brush, small trees/shrubs, and weeds observed along the outside slope of the western embankment with areas of exposed earth.
3. Minor erosion observed at areas of exposed earth on the outside slope of the western embankment.
4. Ruts and depressions observed near the toe of the western embankment.
5. Stumps (with associated below grade root balls) approximately 2- to 4-inches in diameter observed at the outside slope of the western embankment from past vegetative maintenance activities.

**Ash Recycle Pond No. 3:**

1. Overgrown woody vegetation observed at the southern inside slope near the wet well.

**Ash Recycle Pond No. 4:**

1. Woody vegetation observed at the southern inside slope.
2. Overgrown woody vegetation, brush, small trees/shrubs and weeds observed along the outside slope of the western embankment with areas of exposed earth.
3. Erosion observed at areas of exposed earth on outside slope of the western embankment.
4. Ruts and depressions observed at the toe of the western embankment and areas of wet spongy ground.

**RECOMMENDATIONS**

**The following recommendations and remedial measures generally describe the recommended approach to address current deficiencies.** Prior to undertaking recommended maintenance, repairs, or remedial measures, the applicability of environmental permits needs to

be determined for activities that may occur within resource areas under the jurisdiction of the appropriate regulatory agencies.

### **Studies and Analyses**

#### **GZA recommends the following studies and analyses:**

1. Perform a seepage analysis to assess the factor of safety of piping failure, at Ash Recycle Ponds 1 through 4.
2. Perform a geotechnical stability analysis of the Ash Recycle Pond embankments under all applicable loading conditions, including earthquake-induced loading.
3. Perform a detailed hydrologic and hydraulic study using current methodology to evaluate each impoundment's ability to safely pass the standard design flood.
4. Investigate cause of shallow standing water/spongy ground at the toe of Pond's 2 and 4 western embankment.

### **Recurrent Operation and Maintenance Recommendations**

#### **GZA recommends the following operation and maintenance level activities:**

1. Monitor sloughing and areas of erosion, ruts or depressions on the embankments and maintain a schedule for addressing deficiencies observed.
2. Monitor shallow standing water and wet spongy ground at the toe of the common western embankment of Ash Recycle Ponds 2 and 4.

### **Minor Repair Recommendations**

**GZA recommends the following minor repairs which may improve the overall condition of the Ponds, but do not alter their current design.** The recommendations may require design by a professional engineer and construction contractor experienced in dam construction.

1. Regularly repair sloughs and erosion observed on the embankments. Consideration should be given to providing permanent erosion protection (i.e. revetment matting or similar) as necessary.
2. Clear and grub woody vegetation from outside slope of the western embankments of Ponds 2 and 4 and fill depressions from root balls with compacted sand and gravel. Provide loam as necessary and seed and maintain a healthy grass cover.
3. Re-grade inside and outside slopes of all Ponds as necessary to achieve 2H:1V geometry as specified of the original design drawings. This is best achieved during times when the Ponds are dewatered for cleaning/dredging.
4. Repair railings around wet wells.

### **Remedial Measures Recommendations**

1. Make provisions to address any deficiencies identified by the above recommended seepage and stability analyses.
2. Make provisions to address any deficiencies identified by the above recommended hydrologic and hydraulic analyses.

It should be noted that during the over the 12 months time since the filing our Draft Report and receipt of comments from the EPA thereon, it is GZA's understanding that EME has decided to significantly upgrade the Homer City Generation Station facility. According to EME, the upgrade includes the installation of a Flue Gas Desulfurization (FGD) system to Units 1 and 2 resulting in the permanent closure of Ash Recycle Ponds 1 through 4 and replacement by a closed loop Ash Handling System. This system eliminates the wastewater stream that is currently conveyed to the Ash Recycle Ponds, thereby eliminating the Ponds in the future. Construction of the Ash Handling System is currently underway and is scheduled to be completed in September of 2012. A Closure Plan for the Ash Recycle Ponds was submitted and approved by PADEP. We understand Ash Recycle Ponds 1 and 2 have already been successfully closed in order to begin construction of the FGD system. Ash Recycle Ponds 3 and 4 are scheduled to be closed in

October 2012. These events may therefore make moot most, if not all, of the comments and recommendations in this report. However, in keeping with good engineering practice, it is our opinion that it would be prudent for EME to at least implement the above recommended Recurrent Operations and Maintenance activities until permanent closure status is obtained for the final two Ponds. We acknowledge that implementation of the above Studies and Analyses, Minor Repair Recommendations and Remedial Measures Recommendations are no longer critical given the nature of and current extent of actions being undertaken to decommission the impoundments coupled with the fact that failure of the impoundments, in our opinion, is unlikely to result in the loss of life and losses (economic or environmental) would be principally limited to the owner's property.